

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

CLEANUP AND ABATEMENT ORDER NO. 2000-22

PALOMAR PLATING COMPANY, INC.
722 W. FOURTH AVENUE, ESCONDIDO
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego Region hereinafter RWQCB) finds that:

1. Palomar Manufacturing Company, Inc is a California Corporation doing business as Palomar Plating Company, Inc. (Palomar Plating). Palomar Plating is a firm that electroplates customer products and occupies a cluster of four buildings on the site. The Harding Family Trust and the Lucille J. Harding Trust are the property owners. The persons/entities listed are hereinafter referred to as the "discharger(s)" under the provisions of the California Water Code and/or by existing precedents previously established by the State Water Resources Control Board (SWRCB).
2. On November 24, 1999, the RWQCB received a report entitled "Additional Site Assessment Report", dated November 23, 1999. The maximum concentration of ground water contaminants from monitoring wells or hydropunch samples in 1999 are as follows:

| <u>Organic Constituents</u> | <u>Maximum Concentration (ug/L)</u> |
|------------------------------|-------------------------------------|
| Tetrachloroethene | 1,700 |
| Trichloroethene | 750 |
| 1,1,1-Trichloroethane | 3,500 |
| 1,1-Dichloroethane | 160 |
| 1,1-Dichloroethene | 1,500 |
| Total Petroleum Hydrocarbons | 34,000 |
| Benzene | 1,300 |
| Ethylbenzene | 1,400 |
| Toluene | 4,700 |
| Xylenes | 8,100 |

| <u>Inorganic Constituents</u> | <u>Maximum Concentration (ug/L)</u> |
|-------------------------------|-------------------------------------|
| Chromium | 662 |
| Copper | 154 |
| Lead | 140 |
| Nickel | 2250 |

3. The *Water Quality Control Plan for the San Diego Basin (9)* (Basin Plan) was adopted by the RWQCB on September 8, 1994; approved by the State Water

Resources Control Board (SWRCB) on December 13, 1994; and approved by the Office of Administrative Law on April 26, 1995. The Basin Plan establishes water quality objectives for the San Diego Basin.

4. The site is located within an area of the Escondido Creek watershed in the Basin Plan (1994). The Basin Plan identifies the following designated beneficial uses as having been established for surface water resources of the Escondido Creek Hydrologic Subarea (HSA 4.62):
 - a) Municipal and domestic supply (MUN).
 - b) Agricultural Supply (AGR).
 - c) Industrial Service Supply (IND).
 - d) Potential Industrial Process Supply (PROC).
 - e) Water contact recreation (REC1).
 - f) Non-contact water recreation (REC2).
 - g) Warm freshwater habitat (WARM).
 - h) Cold freshwater habitat (COLD).
 - i) Wildlife habitat (WILD).
5. The following designated beneficial uses have been established by the Basin Plan for ground water resources of the Escondido Hydrologic Subarea (HSA 4.62):
 - a) Municipal and domestic supply (MUN).
 - b) Agricultural Supply (AGR).
 - c) Industrial Service Supply (IND).
6. The discharge(s) of wastes at the site has created a condition of pollution, as defined in the California Water Code Section 13050, in the ground water based upon maximum contaminant levels established in the California Code of Regulations, Title 22 (22 CCR) for human consumption. The following maximum contaminant levels (MCLs) are established for primary drinking water constituents pursuant to California Code of Regulations (CCR), Title 22, Division 4, Chapter 15, Article 5.5, Section 64444 and federal requirements:

| <u>Constituent</u> | <u>Maximum Contaminant Level (ug/L)</u> |
|-----------------------|---|
| Tetrachloroethene | 5 |
| Trichloroethene | 5 |
| 1,1,1 Trichloroethane | 200 |
| 1,1 Dichloroethane | 5 |
| 1,1 Dichloroethene | 6 |
| Benzene | 1 |
| Ethylbenzene | 700 |
| Toluene | 150 |

| <u>Constituent</u> | <u>Maximum Contaminant Level (ug/L)</u> |
|--------------------|---|
| Xylenes | 1750 |
| Chromium (Total) | 50 |
| Copper | 1300 |
| Lead | 15 |
| Nickel | 100 |

7. The groundwater results (Finding No. 2 above) indicate that the discharge of wastes at the site has created a condition of pollution in violation of California Water Code (Section 13304).
8. Pursuant to State Water Resources Control Board (SWRCB) Resolution No. 92-49, the RWQCB shall require the discharger(s) to conduct investigation and cleanup and abatement in a progressive sequence comprised of the following steps:
 - a) preliminary site assessment;
 - b) soil and water investigation;
 - c) proposal and selection of cleanup and abatement action (to evaluate feasible and effective cleanup and abatement actions);
 - d) implementation of cleanup and abatement action; and
 - e) monitoring to confirm the short and long-term effectiveness of cleanup and abatement.
9. Pursuant to State Water Resources Control Resolution No. 68-16 the RWQCB is required to ensure that dischargers are required to clean up and abate the effects of discharges in a manner that promotes the attainment of background water quality, or the highest water quality which is reasonable if background levels can not be restored, considering all demands being made and to be made on those waters and the total values involved, beneficial and detrimental, economic and social tangible and intangible; any alternative levels less stringent than background shall:
 - a) be consistent with the maximum benefit to the people of the state;
 - b) not unreasonably affect the present and anticipated beneficial use of such water; and
 - c) not result in water quality less than that prescribed in the Water Quality Control Plans and Policies adopted by the State and Regional Water Boards.
10. State Water Resources Control Board (SWRCB) regulations governing waste discharges to land (CCR, Title 23, Division 3, Chapter 15) require that cleanup and abatement actions intended to contain waste at the place of release shall implement the applicable provisions of that chapter, to the extent feasible (CCR, Title 23, Division 3, Chapter 15, Section 2511(d)). Article 5 of that chapter will be considered in establishing cleanup levels (CCR Title 23, Chapter 15, Section

2550.4) and undertaking corrective actions where discharges of waste are subject to California Water Code Section 13304.

11. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED, that pursuant to Section 13304 of the California Water Code, the entities/persons identified in Finding No. 1 of this Order (hereinafter the "discharger(s)") shall comply with the following:

CORRECTIVE ACTION PLAN

- ✓ 1. Pursuant to the requirements of the CCR Title 23, Division 3, Chapter 16, Article 5 (Section 2655) and Article 11 (Section 2722(b)); the dischargers shall submit a Corrective Action Plan (CAP) to the RWQCB by **May 1, 2000**, or upon request of the Executive Officer. The CAP must contain all the elements specified in Article 11 (Section 2725) including:
 - ✓ a) an assessment of impacts in accordance with Article 11, Section 2725(e),
 - ✓ b) a feasibility study to evaluate site remediation and mitigation alternatives in accordance with Article 11, Section 2725(f),
 - ✓ c) cleanup levels in accordance with the requirements of Article 11, Section 2725(g) and which comply with the requirements listed in Article 11, Section 2721(b), SWRCB Resolution No. 92-49, and Finding No. 6 of this Order,
 - ✓ d) proposed method(s) and schedule for the monitoring and reporting the progress of remediation at the site. These results should be used by the dischargers to evaluate the effectiveness of the approved corrective action alternative implemented by the dischargers to remediate the soil and ground water contamination from the unauthorized release at this site. The results and the technical evaluation must be reported to the RWQCB Executive Officer for review and comment.

The feasibility study described in **Directive No. 1b** of this order shall contain an evaluation of alternatives for cleanup of soil and ground water. The evaluation shall be consistent with the requirements of CCR Title 23, Division 3, Chapter 16, Section 2725(f) and include the following elements:

- ✓ a) An evaluation of the effectiveness, feasibility and cost of at least two alternatives to attain the following primary MCL water quality levels:

| <u>Constituent</u> | <u>Maximum Contaminant Level (ug/L)</u> |
|-----------------------|---|
| Tetrachloroethene | 5 |
| Trichloroethene | 5 |
| 1,1,1 Trichloroethane | 200 |
| 1,1 Dichloroethane | 5 |
| 1,1 Dichloroethene | 6 |
| Benzene | 1 |
| Ethylbenzene | 700 |
| Toluene | 150 |
| Xylenes | 1750 |
| Barium | 1000 |
| Chromium(Total) | 50 |
| Copper | 1300 |
| Lead | 15 |
| Nickel | 100 |
| Zinc | 5000 |

- ✓ b) An evaluation of methods to control the spread of the dissolved contaminant plume off the property occupied by Palomar Plating.
- ✓ c) A comprehensive description of the cleanup and abatement activities associated with each recommended alternative.
- ✓ d) A proposed time schedule, including interim milestone dates, for completion of each recommended alternative.
- e) The discharger shall remove and/or treat all contaminated soils to a level which will not cause site related contaminants to leach into the ground water at concentrations which exceed the water quality objectives.

The discharger shall modify the CAP as directed by the RWQCB Executive Officer. Implementation of the CAP may begin within **60 calendar days** after submittal, unless the RWQCB Executive Officer otherwise directs the discharger in writing.

VERIFICATION SAMPLING AND MONITORING

2. Upon completion of corrective action, the discharger shall perform soil sampling and ground water monitoring which is necessary to verify:
 - a) the effectiveness of the selected remedial alternative(s) identified in the Corrective Action Plan and/or,

- b) other interim remedial action(s) implemented at the site. The dischargers shall prepare a proposed work plan for verification sampling and monitoring in compliance with Section 2727 of Article 11.

The work plan for verification sampling and monitoring of the completed corrective action plan (**Directive No. 1**) must be submitted to the RWQCB for review and approval within **60 days** of full implementation of the CAP. The discharger shall modify the proposed work plan as required by the RWQCB Executive Officer.

The results from the verification and monitoring work plan must be submitted to the RWQCB Executive Officer within **90 days** of approval of the verification and monitoring work plan by the RWQCB. An alternative deadline may be proposed to the RWQCB Executive Officer in the event that long-term monitoring is required at the site.

The discharger shall manage all contaminated ground water and/or soil, generated as a result of any corrective action work at this site, in accordance with all applicable local, state and federal regulations and requirements.

Based upon review of the Corrective Action Plan, interim remediation action work plan and/or verification sampling and monitoring results, the RWQCB Executive Officer may amend this cleanup and abatement order to identify the target ground water and soil cleanup levels to be attained at the site. If this Order is not amended by the RWQCB Executive Officer, then the water quality protection standards (maximum contaminant levels) identified in Finding 6 of this Order will be adopted as the maximum ground water contaminant concentration levels allowed for the site.

The discharger shall implement the Corrective Action Plan in accordance with a time schedule proposed by the discharger and approved by the RWQCB Executive Officer. The discharger shall modify the proposed Corrective Action Plan as required by the RWQCB Executive Officer.

GROUND WATER MONITORING

3. The discharger shall implement ground water monitoring at the site. The discharger shall propose a detailed ground water monitoring plan, including the number of wells to be monitored and the frequency of monitoring and reporting to the RWQCB Executive Officer. The RWQCB Executive Officer may require or approve a modification of the number of wells and/or the frequency of ground water monitoring and reporting as necessary. The proposed ground water monitoring plan shall be submitted to the RWQCB Executive Officer on or before **May 1, 2000**.

All ground water wells shall be constructed in a manner that maintains the integrity of the borehole and prevents cross-contamination of the saturated zones. The wells shall be constructed and maintained in accordance with the requirements of CCR Title 23, Chapter 16, Article 4; Department of Water Resources (DWR) Bulletins 74-81 and 74-90; and other requirements from the local permitting agency (San Diego County Department of Environmental Health - DEH). All well logs shall be reported to the appropriate State (DWR) and local (San Diego County DEH) agencies. In case of a conflict between the well construction and maintenance requirements, the discharger shall adopt the most stringent of the requirements as its well construction standard.

New ground water monitoring wells shall be designed and certified as adequate pursuant to CCR Title 23, Chapter 15, Section 2555 by a registered geologist or a registered civil engineer in the State of California.

Prior to sampling the monitoring wells, the discharger shall determine if a floating immiscible layer (non-aqueous phase liquid or NAPL) of free petroleum product exists in each well. The thickness of any NAPL layer observed in ground water monitoring wells shall be recorded and reported as part of the quarterly ground water reporting program.

Prior to sampling the ground water wells as required in this order, the discharger shall measure and record the depth to static water level in each well. The discharger shall report the depth to static ground water, elevation of ground water, depth to and elevation of the top of the screened interval and the elevation of the top of casing shall be tabulated and reported for each well included in the monitoring program.

Prior to sampling the wells, the water standing in the casing shall be pumped using an appropriate purging methodology which will minimize aeration of the water samples and the destruction of volatile and organic contaminants. The volume of water to be purged shall be either:

- a) at least three to five well volumes (including the gravel pack volume) or
- b) until the water chemistry stabilizes with respect to pH and specific conductance.

Water chemistry can be considered stable when in-line specific conductance and pH readings are within 10% and 0.1 pH units respectively over 2 successive well bore volumes. Water samples shall be obtained that are representative of the fresh aquifer formation water. Provide the calculations of well bore volumes and volumes of water purged from each well, if purging is performed using option a) (three to five well bore volumes) above.

After purging, a representative water sample should be collected when the water level reaches 80% of the static water level. If 80% recovery of the initial water level exceeds two hours, a sample should be collected as soon as the water level is sufficient to recover a representative sample.

Alternative ground water sampling methods may be proposed by the discharger by providing a clear and concise written rationale and proposal for consideration by the RWQCB Executive Officer.

For each indicator compound or waste constituent specified in this order, the discharger shall use appropriate statistical and/or graphical techniques to evaluate trends in concentrations from the ground water samples. The discharger on an annual basis shall conduct an evaluation of trends in contaminant concentrations from ground water samples. The results of this analysis shall be reported to the RWQCB Executive Officer on an annual schedule as an appendix to the final ground water monitoring report for each calendar year.

A letter of transmittal shall accompany each submitted ground water monitoring report. The letter should discuss the essential points in each monitoring report. Such a letter shall discuss any significant findings, violation(s) of requirements found during the monitoring period and actions taken or planned for correcting the violation(s). If the discharger has previously submitted a detailed time schedule for correcting violation(s) a reference to the correspondence transmitting such schedule will suffice. If no violations have occurred in the last monitoring period, it shall be stated in the letter of transmittal. Monitoring reports shall be signed by the preparer of the report and an appropriately registered professional (registered geologist or registered civil engineer) in the State of California. A duly authorized representative of Palomar Plating must sign the letter of transmittal.

REPORTING GROUND WATER MONITORING RESULTS

4. The Ground Water Monitoring Report(s) prepared to satisfy requirements of Ground Water Monitoring Requirements of **Directive No. 3** of this order must include the following minimum information:
 - a) Report of the historical observations of the measured depths to ground water in each well associated with the Palomar Plating site. Provide a narrative description of the method(s) used to make the required measurements. For each well, tabulate data on depth to ground water, top of casing elevations, depths to the top of well screens and total depth for each well included in the monitoring program.

- b) Provide ground water elevation contour maps for the site with the ground water flow direction and calculated hydrologic gradient(s) clearly indicated on the figure(s).
- c) Provide a site plot plan which clearly illustrates the locations of monitoring wells, above ground tanks, former/current underground storage tank systems (and product piping) and buildings located on site and immediately adjacent to the property lines of the site.
- d) For each ground water monitoring well included in the ground water monitoring program approved by the RWQCB Executive Officer under **Directive No. 3** of this order, provide a tabulation of the following information: elevation of wellhead; thickness of free petroleum product (if present); depth and elevation of static ground water level; depth and elevation of the top of the well screen; screened interval of each well and total depth of well.
- e) A detailed description of sample collection protocol (e.g., well purging, sample collection equipment, sample preservation and shipment procedures and decontamination procedures). Clearly describe any significant changes in sampling protocol or equipment between sampling events.
- f) Analyze ground water samples from all ground water monitoring wells approved by the RWQCB Executive Officer in **Directive No. 3** of this order for the following contaminants using the specified EPA test methods:

Constituent

EPA Test Method

Total Petroleum Hydrocarbons
Volatile Aromatic Hydrocarbons
Title 22 Metals

TPH-DHS or EPA Method 8015
EPA Method 8260
EPA Method 7471

- g) TPH analyses shall include the full range of petroleum hydrocarbons from C₆ to C₂₄ in each analysis.
- h) Provide copies of laboratory data sheets, laboratory QA/QC information and chain-of-custody documents for the most recent round of ground water samples collected for each report.
- i) Provide a site plot plan (as in **Directive 4c** above) with most recent concentrations of total petroleum hydrocarbons, volatile aromatic hydrocarbons (e.g. benzene, toluene, ethylbenzene and total xylenes), and chlorinated compounds with each ground water monitoring report.

- j) Provide a narrative description of the current site conditions and a brief summary of known site hydrogeologic conditions.
- k) Provide a tabulation of historical ground water analytical data collected from the site. Provide technical interpretations of the ground water data, conclusions and recommendations for future action with each report. This information will be considered by the RWQCB Executive Officer to evaluate the current status of the site on an annual basis.
- l) Provide an up to date evaluation of historical trends and changes in ground water monitoring data with each report. The analysis of trends in contaminant concentrations shall be based upon the ground water data acquired during the calendar year. Graphs utilized for this purpose shall be of an appropriate scale to clearly illustrate trends in the ground water data. The analysis of trends in contaminant concentrations will be performed on an annual basis and shall be included in the final regular ground water monitoring report for each calendar year.
- m) Provide a narrative description of how purge water from ground water wells and/or soil cuttings are managed at the site. Provide documentation (e.g., manifests/receipts) of proper disposal of contaminated well purge water and/or soil cuttings removed from the site.
- n) Each report must be reviewed and signed by an appropriately registered professional as required under Sections 6735, 7835 and 7835.1 of the California Business and Professions Code.

DUE DATES FOR GROUND WATER MONITORING REPORTS

| | | |
|-----------|--|---|
| Quarterly | January, February, March April, May, June July, August, September October, November, December | April 30 July 31 October 30 January 30 |
| Annual | January – December | January 30 |

The first quarterly ground water monitoring report is due by **July 31, 2000**.

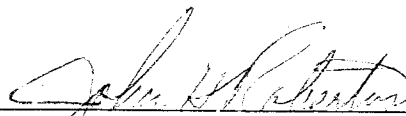
PROHIBITIONS

1. The discharger(s) shall properly manage, treat and/or dispose of contaminated soils and ground water in accordance with applicable federal, state and local regulations.
2. Neither the treatment nor the discharge of wastes shall create a condition of pollution or nuisance as defined in Section 13050, Division 7 of the California Water Code.
3. The discharge of any low volume, non-hazardous wastes or waste constituents which are generated as a result of cleanup and abatement action at this site is prohibited unless the discharge is permitted under the National Pollutant Discharge Elimination System (NPDES) or by issuance of Waste Discharge Requirements (WDR) by the RWQCB under Section 13260 of the California Water Code.

REIMBURSEMENT OF REGULATORY OVERSIGHT COSTS

Pursuant to Section 13304 of the Water Code, the discharger(s) is hereby notified that the RWQCB is entitled to, and may, seek reimbursement for all reasonable costs actually incurred by the RWQCB staff to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement or the effects thereof, or other remedial action required by this cleanup and abatement order. Reimbursable costs may include costs incurred by the RWQCB following **June 21, 1996**. Upon receipt of a billing statement for such costs, the discharger(s) shall reimburse the RWQCB.

Failure to submit technical reports required under this cleanup and abatement order may result in the imposition of civil liabilities, under the California Water Code Section 13350(d), in an amount not to exceed fifteen thousand dollars (\$15,000) for each day in which the violation occurs.



JOHN H. ROBERTUS
Executive Officer

Date issued: January 14, 2000

TABLE 1

PALOMAR PLATING SITE: 722 WEST 4TH AVENUE, ESCONDIDO
SUMMARY OF COMPLIANCE DATES FOR CAO 2000-22

| DIRECTIVE NO. | SUBMITTAL TO RWQCB | DUE DATE |
|---------------|--|---|
| 1 | Corrective Action Plan | ^{may} April 1, 2000 |
| 2 | Verification Soil Sampling and Groundwater Monitoring Report | Four months after the implementation of the selected remedial alternative(s) has ceased. |
| 3 | Proposed Groundwater Monitoring Program | ^{may} April 1, 2000 |
| 4 | Groundwater Monitoring Reports | Quarterly (per schedule in Directive No. 4) for 2 consecutive years |